Name: _____ Per: _____

The Periodic Table & Chemical Bonding WS 3[A] "Naming Ionic Compounds"

Formula	NAME OF COMPOUND
Ca_3N_2	
CsCl	
Li_2O	
Cs_3N	
CaS	
Ra_3P_2	
Al_2S_3	
$BaCl_2$	

Name	Charge of each ion	Formula
Cesium Fluoride	Cs^+, F^-	CsF
Beryllium Oxide		
Calcium Chloride		
Aluminum Nitride		
Strontium Sulfide		

Formula	NAME OF COMPOUND
Cu_3N_2	
CoCl	
FeO	
Ni_3N_2	
Ag_2S	
Zn_3P_2	
Fe_2S_3	
$CuCl_2$	

Name: _____ Per: _____

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If given the formula, to write the compound name, FIRST list the name of the metal from the periodic table, SECOND list the name of the non-metal, CHOP OFF THE ENDING and add -ide.

Tricky nonmetals:

Phosphorus → _____ Oxygen → _____

Selenium → _____ Carbon → _____

Arsenic → _____ Nitrogen → _____

Examples:

Mg_3P_2 → _____

Ca_3N_2 → _____

Rb_2O → _____

Transition metals can have multiple oxidation states / or form multiple types of ions! To distinguish what type of ion is part of the bond, you must include the ionic charge inside of parentheses using roman numerals. Use the REVERSE ion criss cross to find the charge.

Fe_2O_3 → _____

FeO → _____

$CuCl_2$ → _____

In the transition metals, there are **3 exceptions** that **do not require** the ionic charge / oxidation state inside of parentheses!
Silver (Ag) ALWAYS has a +1 charge
Zinc (Zn) and cadmium (Cd) ALWAYS have a +2 charge

AgBr → _____

Zn_3N_2 → _____

CdS → _____